Clarke®

WOODWORKER

BELT/DISC SANDER

MODEL NO: CBS1-5

PART NO: 6500403

OPERATION & MAINTENANCE INSTRUCTIONS

CE

GC0414

INTRODUCTION

Thank you for purchasing this CLARKE Belt and Disc Sander, which is designed for hobby, DIY and light workshop use for sanding wood and wood products.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

GENERAL SAFETY RULES

WARNING: WHEN USING ELECTRIC TOOLS, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK AND PERSONAL INJURY INCLUDING THE FOLLOWING. READ ALL THESE INSTRUCTIONS BEFORE ATTEMPTING TO OPERATE THIS PRODUCT AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

GENERAL SAFETY IN THE WORKPLACE

1. ALWAYS ensure that air can circulate around the machine and that the air vents are unobstructed.
2. ALWAYS keep work area clean & tidy. Cluttered work areas and benches invite accidents.
3. NEVER over-reach. Keep proper footing and balance at all times.
4. NEVER store equipment in a wet/damp environment or expose to rain.

5. KEEP other persons away. Do not let persons, especially children, not involved in the work, touch the tool or extension cable and keep them away from the work area.
6. NEVER operate a machine when under the influence of alcohol, drugs or medication.
7. ALWAYS ensure the workplace is well lit. Ensure that lighting is placed so that you will not be working in your own shadow.
8. Do not use tools in the presence of flammable liquids or gasses.
9. Stay alert, watch what you are doing, use common sense and do not operate the tool when you are tired.

CARE OF POWER TOOLS

1. Read this manual carefully. Learn the machines applications and limitations, as well as the specific potential hazards peculiar to it.
2. ALWAYS keep guards in place and in working order. A guard or other part that is damaged should be properly repaired or replaced by an authorised service centre, unless otherwise indicated in this instruction manual.
3. Don't force the machine and use the correct tool. It will do the job better and safer, at the rate for which it was intended.
4. ALWAYS disconnect the machine from the power supply before carrying out any servicing or changing of accessories.
5. Before further use of the tool, it should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting or other condition that may affect its operation.
6. Have defective switches repaired by an authorised service centre. Do not use a tool if the switch does not turn it on and off.
7. ALWAYS check for any damage or any condition that could affect the operation of the machine. Damaged parts should be properly repaired.
8. Have your tool repaired by a qualified person. This tool complies with the relevant safety rules. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.
9. NEVER use this product for any other purpose than that described in this booklet.
10. NEVER abuse the power cable by yanking the cable to disconnect it from the socket. Keep the cable away from heat, oil or sharp edges.
11. Guard against electric shock. Avoid body contact with earthed or grounded surfaces.

12. If the machine should be used outdoors, use only extension cables intended for outdoor use and marked accordingly.
13. Avoid accidental starting by making sure the power switch is off before plugging in the power cable.

ADDITIONAL PRECAUTIONS FOR BELT & DISC SANDERS

1. ALWAYS wear ear protectors/defenders when using this machine.
2. ALWAYS wear a dust mask when using this machine. Be aware of harmful or toxic dust produced when sanding some woods, paint, etc.
3. ALWAYS use the sanding belt support or table to support the workpiece.
4. Always check to ensure that the table, belt support and attachments are secure before starting.
5. ALWAYS maintain a clearance of 1.5-2mm between the table and the sanding belt or disc.
6. ALWAYS hold the workpiece firmly so that it cannot be pulled from your hands.
7. ALWAYS feed the workpiece against the direction of rotation of the disc. i.e the LEFT side of the disc.
8. ALWAYS keep the mains cable well away from the machine and ensure an adequate electrical supply is close at hand so that the operation is not restricted by the length of the cable.
9. ALWAYS use a dust extraction device, properly connected to the dust extraction port.
10. ALWAYS ensure that nails or any foreign objects have been removed from a workpiece beforehand. Nails etc., will destroy the belt or disc.
11. NEVER allow the ventilation slots in the motor to become blocked.
12. NEVER sand pieces which cannot be held firmly by hand.

WARNING: USE ONLY FOR SANDING WOOD. DO NOT USE FOR MATERIALS CONTAINING ASBESTOS, PAINTED SURFACES OR MATERIALS WHICH EMIT TOXIC PARTICLES.

DUST EXTRACTION

The sander is provided with a dust extraction facility. Please note however, that this does not preclude the user from wearing a face mask to prevent the inhalation of dust particles.

It is an EEC requirement that a dust extraction facility be provided on power tools, however, due to the nature of the sander, some of the dust produced will be forced into the surrounding atmosphere and will not be collected.

ELECTRICAL CONNECTIONS

WARNING: READ THESE ELECTRICAL SAFETY INSTRUCTIONS THOROUGHLY BEFORE CONNECTING THE PRODUCT TO THE MAINS SUPPLY.

Before switching the product on, make sure that the voltage of your electricity supply is the same as that indicated on the rating plate. This product is designed to operate on 230VAC 50Hz. Connecting it to any other power source may cause damage.

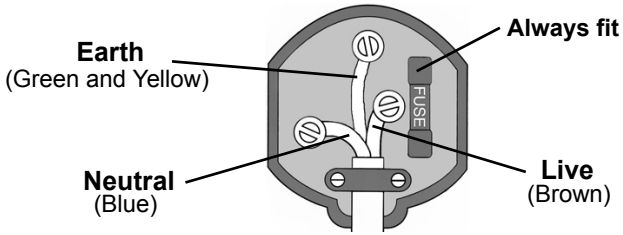
This product may be fitted with a non-rewireable plug. If it is necessary to change the fuse in the plug, the fuse cover must be refitted. If the fuse cover becomes lost or damaged, the plug must not be used until a suitable replacement is obtained.

If the plug has to be changed because it is not suitable for your socket, or due to damage, it should be cut off and a replacement fitted, following the wiring instructions shown below. The old plug must be disposed of safely, as insertion into a mains socket could cause an electrical hazard.

WARNING! The wires in the power cable of this product are coloured in accordance with the following code:
Blue = Neutral Brown = Live Yellow and Green = Earth

- The wire which is coloured **Blue** must be connected to the terminal which is marked **N** or coloured **Black**.
- The wire which is coloured **Brown** must be connected to the terminal which is marked **L** or coloured **Red**.
- The wire which is coloured **Yellow and Green** must be connected to the terminal which is marked **E (⏚)** or coloured **Green**.

Plug must be BS1363/A approved.

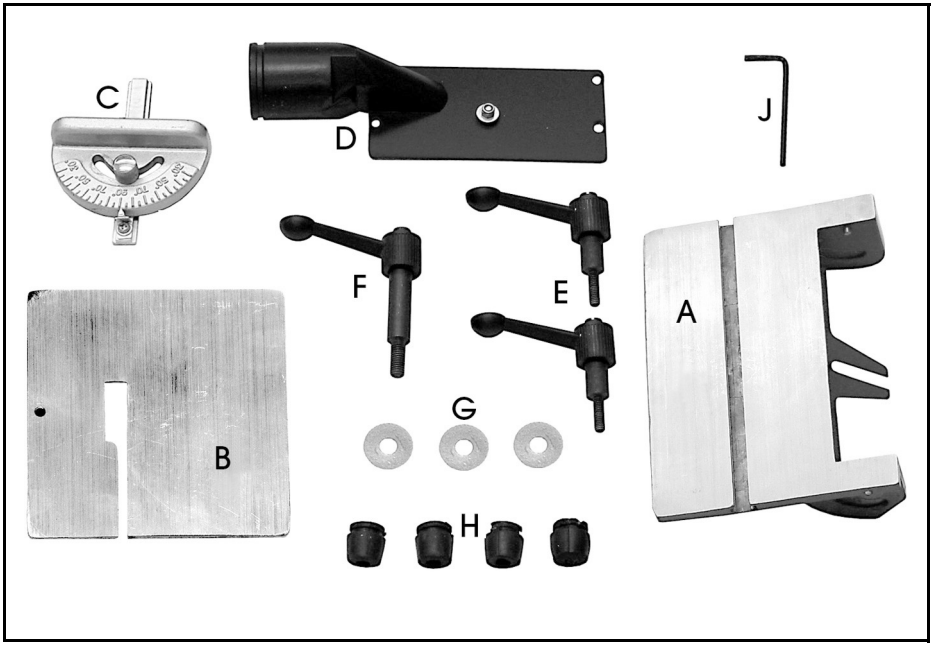


Ensure that the outer sheath of the cable is firmly held by the clamp

WE STRONGLY RECOMMEND THAT THIS MACHINE IS CONNECTED TO THE MAINS SUPPLY VIA A RESIDUAL CURRENT DEVICE (RCD).

If in any doubt, consult a qualified electrician. DO NOT attempt any repairs yourself.

PRODUCT OVERVIEW



NO	DESCRIPTION
A	Disc Sanding Table
B	Belt Sanding Table
C	Mitre Gauge
D	Disc Cover/Dust Extract Point
E	Disc Sanding Table Locking Levers

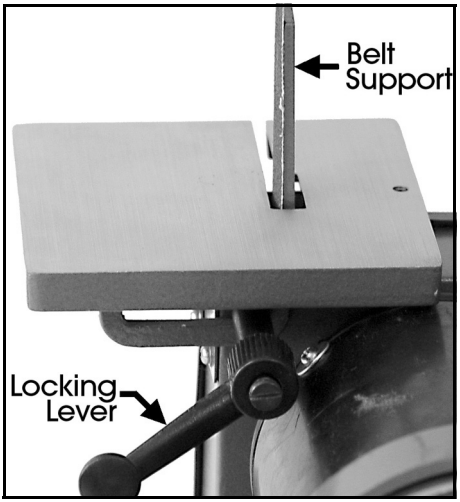
NO	DESCRIPTION
F	Vertical Table Locking Levers
G	Flat Washers (for use with E & F)
H	Rubber Feet
J	Allen Keys

WARNING: THE USE OF ANY ACCESSORY/ATTACHMENT OTHER THAN THOSE RECOMMENDED IN THIS INSTRUCTION MANUAL MAY PRESENT A RISK OF PERSONAL INJURY.

ASSEMBLY

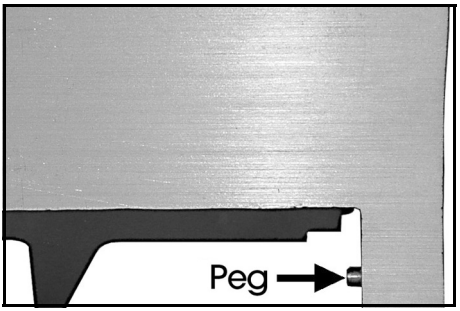
BELT TABLE

1. Gently ease the table into place with the belt support entering the slot in the table.
2. Screw the Table Locking Lever into place, ensuring a flat washer is used on the levers' threads.

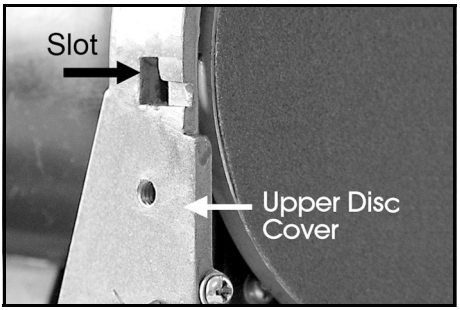


DISC TABLE

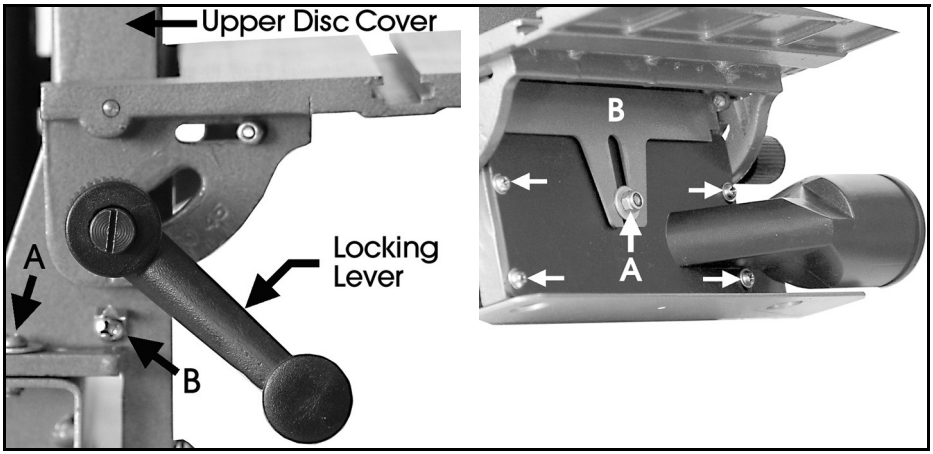
1. Slide the table pegs into the slots in the Upper Disc Cover to the extent that the Locking Levers can be screwed in as shown overleaf, ensuring flat washers are used on the locking lever threads.



2. With the table secured, position the Disc Cover/Dust Extraction Port as shown, with the locating pin on the cover 'A', engaged in the slot in the hinged cover 'B'.



3. Secure with four screws (arrowed).

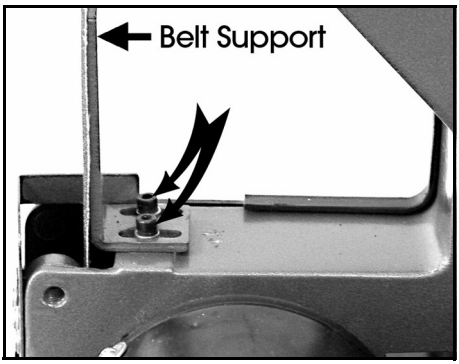


FEET

The four feet may be very gently eased into the holes at the base of the machine. Alternatively, the machine may be mounted on a workbench or a wooden base, using the four holes in the base as mounting holes. In order to maintain complete stability when in use, the wooden base should be secured to a workbench using 'G' clamps.

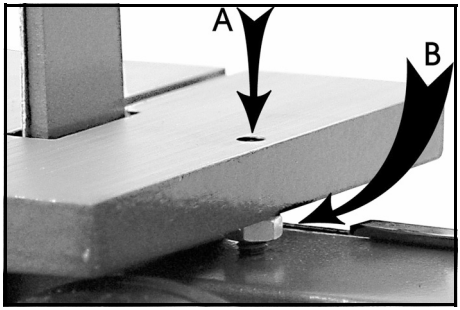
ADJUSTMENTS BEFORE USE

BELT TABLE ADJUSTMENT



1. With the belt correctly tensioned (See Maintenance), adjust the Belt Support so that it is square and bears very lightly on the back of the Sanding Belt.
2. Ensure the two hex socket head securing screws (arrowed) are tight. A hex. socket wrench is provided.
3. Slacken the Table Locking Lever and position the table so that a gap of 1.5 - 2 mm exists between the slot in the table and the belt, then lightly secure the table using the locking lever.

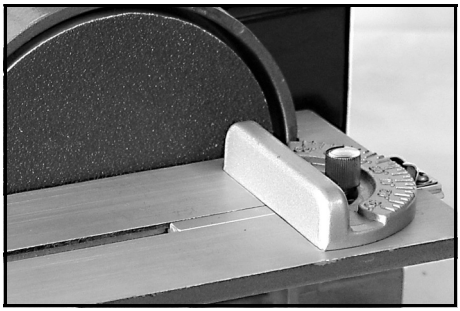
4. Place an engineers square on the table so that it butts up against the belt, then unlock the adjuster by unscrewing the locknut at B.
5. Screw the adjuster A, clockwise or anticlockwise whilst bearing down on the table at a point adjacent to screw A, until the square indicates that the table is at right angles.



6. Lock the adjuster, ensuring the nut is tight, then, maintaining pressure on the table, finally secure the table using the locking lever. by turning anticlockwise.
7. Finally, check to ensure the gap between the table and belt is between 1.5 - 2 mm.
8. It is possible to set the table to any angle up to 45 degrees, simply by slackening the locking lever and positioning the table using a protractor or angle setter, then retightening the locking lever.

DISC TABLE ADJUSTMENT

1. Place an engineers square on the table and slacken the locking levers slightly.
2. Adjust the table so it is at right angles to the disc, using the square, then tighten the levers.
3. If necessary, adjust the pointer, adjacent to the angle indicator beneath the table, so that it registers zero.



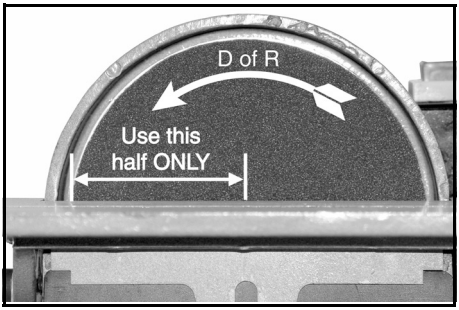
4. Slacken the upper disc cover securing screws (A on page 8) using the wrench supplied, and adjust so that a gap of 2-3mm exists between the disc and the table and the table is square. Tighten the securing screws.
5. It is possible to set the table to any angle up to 45 degrees, simply by slackening the locking levers and positioning the table using the angle indicator, then retightening the locking levers. If the angle is critical, a protractor or angle setter should be used.
6. If required, slide the quadrant into its groove in the table.

NOTE: The quadrant may be used to hold a workpiece at any desired angle for sanding that angle with accuracy.

OPERATION

IMPORTANT: Ensure that ALL components are secure, ALL correct adjustments have been carried out, and ALL safety precautions have been observed BEFORE plugging the machine into the mains supply, and switching ON.

1. Attach a vacuum cleaner or other dust extraction device to the relevant extraction port (depending upon the medium to be used) and switch it ON.
2. Switch the machine ON by pressing the Green ON button.
3. If using the belt, check to ensure it is tracking properly...adjust if necessary.



4. Holding the workpiece firmly, place it on the table and gently slide it into contact with the belt or disc. Do not force it, only a light pressure is required.

IMPORTANT: When using the sanding disc, ALWAYS use the left half of the disc ONLY, i.e. that, side where the direction of rotation of the disc is down towards the table.

MAINTENANCE

Always inspect the sander before use and ensure it is in top condition.

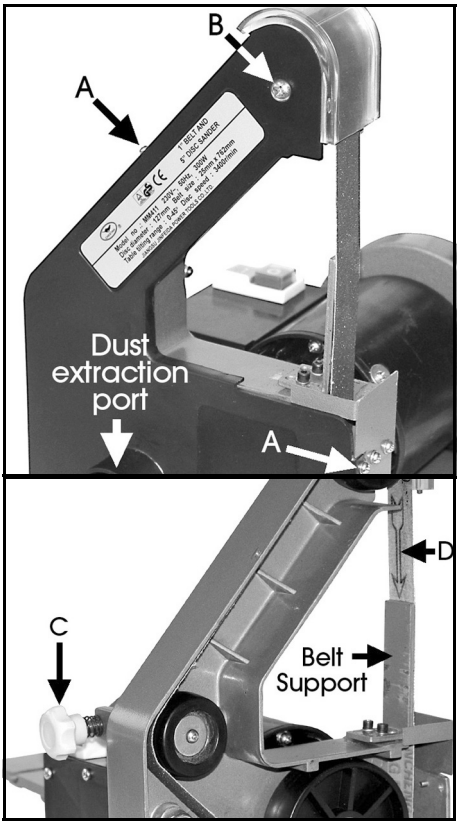
Ensure all air vents are clear. (Use compressed air to clean the machine where possible).

Check the power cable to ensure it is sound and free from damage. Avoid using solvents when cleaning plastic parts, (most plastics are susceptible to damage from the various types of commercial solvents).

All bearings in this tool are lubricated with sufficient high grade lubricant for the machine's lifetime under normal operating conditions, therefore no further lubrication is required.

CHANGING THE SANDING BELT

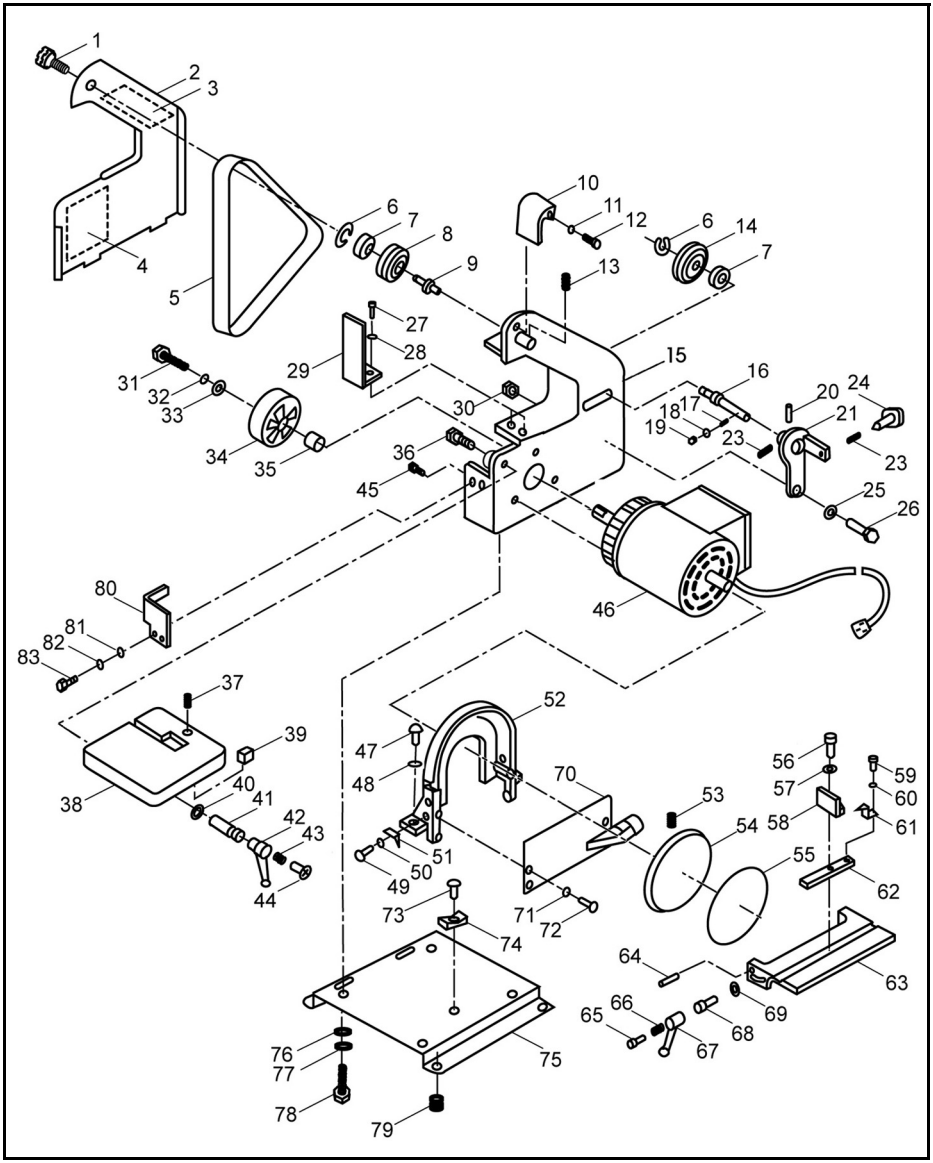
1. Remove the belt table completely by unscrewing and removing the table locking lever.
2. Remove the two side cover securing screws (A), followed by the upper roller pivot screw (B), then pull off the side cover.
3. Turn Adjuster (C) anti-clockwise, sufficiently for the sanding belt to be slipped off the rollers.
4. Replace the sanding belt ensuring it is central about the rollers, and the arrow (D) is pointing down towards he table.
5. Turn the belt by hand and observe how it moves on the rollers, indicated by its position on the support.
6. This will determine whether or not it is tracking correctly. If it moves sideways, turn the adjuster (C), so that it stabilises over the middle of the support.
    - At this point the belt is tracking properly. It is tensioned automatically & cannot be adjuste
    - Turning the adjuster clockwise will cause the belt to move one way...turning it anticlockwise and it will have the opposite effect.



CHANGING THE DISC

1. Remove the disc table and lower cover/dust extraction port.
2. Slacken the two screws securing the upper disc cover and slide it back.
3. Using a sharp instrument, tease off a portion of the sanding disc, sufficient for it to be grasped by hand and peeled off. Remove all residual adhesive and finally clean the disc with solvent.
4. Peel the backing from the replacement sanding disc and fix to the disc ensuring it is central. Press it firmly to ensure it is secure.
5. Replace the table and lower disc cover, and adjust gap between table and disc by positioning and securing the upper disc cover.

PARTS DIAGRAM



When requesting spare parts, please quote the reference HT-CBS1-5 followed by the id number listed.

PARTS LIST

ID	DESCRIPTION
1	Knob
2	Cover
3	Label
4	Warning Label
5	Belt
6	Circlip
7	Bearing
8	Driven Wheel
9	Shaft
10	Plastic Belt Guard
11	Washer
12	Screw
13	Screw
14	Pulley
15	Body
16	Adjustable Shaft
17	Spring
18	Washer
19	Circlip
20	Spring Pin
21	Adjustable Plate
22	Spring
23	Spring
24	Knob
25	Washer
26	Bolt
27	Screw
28	Washer
29	Support Bracket
30	Nut

ID	DESCRIPTION
31	Screw
32	Elastic Washer
33	Washer
34	Wheel
35	Insert
36	Bolt
37	Screw
38	Table
39	Nut
40	Washer
41	Bolt
42	Lever
43	Spring
44	Screw
45	Screw
46	Motor
47	Screw
48	Washer
49	Screw
50	Washer
51	Pointer
52	Cover
53	Screw
54	Disc
55	Sanding Disc
56	Knob
57	Washer
58	Mitre Gauge
59	Screw
60	Washer

ID	DESCRIPTION
61	Pointer
62	Sliding Bar
63	Table
64	Pin
65	Screw
66	Spring
67	Lever
68	Bolt
69	Washer
70	Lower Disc Cover
71	Washer
72	Screw
73	Screw
74	Rubber Pad
75	Base
76	Washer
77	Spring Washer
78	Bolt
79	Rubber Pad
80	Side Cover
81	Washer
82	Spring Washer
83	Screw

Parts & Service: 020 8988 7400 / E-mail: Parts@clarkeinternational.com or Service@clarkeinternational.com

REPLACEMENT DISCS AND BELTS

Sanding Discs 60 grit (pack of 5). Part No: 6502345
Sanding Discs 80 grit (pack of 5). Part No: 6502350
Sanding Discs 120 grit (pack of 5). Part No: 6502355
Sanding Belts 60 grit (pack of 5). Part No: 6502330
Sanding Belts 80 grit (pack of 5). Part No: 6502335
Sanding Belts 120 grit (pack of 5). Part No: 6502340

ENVIRONMENTAL RECYCLING POLICY

Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

SPECIFICATION

Electrical Supply	230V 50Hz 1 ph
Power rating	300 Watt motor
Fuse rating	5 Amp
Motor Speed	2800 rpm
Net Weight	8kg
Sanding Disc Size	127mm (5")
Belt Width	25mm (1")
Belt Speed	13.5m/s
Dust Extract Port Dia	47mm (1.7/8")
Dimensions (L x W x H)	360 x 280 x 390mm
Insulation Class	B

DECLARATION OF CONFORMITY

CE

Clarke® INTERNATIONAL

Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):

2004/108/EC	*Electromagnetic Compatibility Directive.*
2006/42/EC	*Machinery Directive.*
2011/65/EU	*Restriction of Hazardous substances*

The following standards have been applied to the product(s):

EN 61029-1:2009+A11:2010, EN ISO 12100:2010, EN 61000-3-2:2006+A2:2009, EN 61000-3-3:2008, EN 55014-2:1997+A2:2008, EN 55014-1:2009

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2003

Product Description:	1 x 5 Belt and Disc Sander
Model number(s):	CBS 1-5
Serial / batch Number:	N/A
Date of Issue:	03/09/2013

Signed:

J.A. Clarke
Director

CBS1-5 D O C (rv2) (2)

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A SELECTION FROM THE VAST RANGE OF

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